

Notice of Allowability

Application No.

10/613,064

Examiner

Laura M. Schillinger

Applicant(s)

KWEON, YOUNG-CHAN

Art Unit

2813

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 3/21/05.
2. ☒ The allowed claim(s) is/are 16-22, 38-41, 53-62. *39* *- Lu*
3. ☒ The drawings filed on 07 July 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>2/28/05</u> <i>9/28/05</i> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

IN THE SPECIFICATION

Please amend the paragraph beginning on page 1, line 4 as follows:

Notice: More than one reissue application has been filed for the reissue of Patent No. 5,811,318. The present reissue application is a continuation of reissue application no. 09/667,643, which is a reissue of Patent No. 5,811,318.

Cancel claims 50-52.

Please add/revive the following claims as required by the rejoinder made below:

53. A TFT substrate, comprising:
a gate electrode comprising at least a refractory metal film formed over a first portion of a substrate;

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a gate pad comprising the refractory metal film formed on a second portion of a substrate; an insulated film formed over the gate electrode and having an exposed area corresponding to the refractory metal film of the gate pad;

a semiconductor film pattern formed over the insulated film; a source electrode formed over a first portion of the semiconductor film pattern;

a drain electrode formed over a second portion of the semiconductor film pattern;

a passivation film pattern formed over the source electrode, having a contact hole over the drain electrode and having an exposed area corresponding to the refractory metal film of the gate pad;

a first pixel electrode pattern electrically contacted to the drain electrode on the passivation film pattern; and a second pixel electrode electrically contacted to the exposed area of the refractory metal film of the gate pad.

54. A TFT substrate, as recited in claim 53, wherein the refractory metal film comprises a material selected from the group consisting of Cr, Ta, Mo, and Ti.

55. A TFT substrate, as recited in claim 53, further comprising a second metal film formed on the refractory metal film over the first portion of the substrate, and formed on the refractory metal film of the gate pad except for the exposed area thereof.

56. A TFT substrate, as recited in claim 53, wherein the second metal film comprises Al or Al alloy.

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57. A TFT substrate, as recited in claim 53, wherein the insulated film comprises a nitride film SiN.

58. A TFT substrate, as recited in claim 53, wherein the first and second pixel patterns comprise ITO.

59. A TFT substrate as in claim 53, wherein at least one of the first and the second metal film of the gate electrode and the gate pad has tapered-sidewalls.

60. A TFT substrate as in claim 59, wherein the second metal film has tapered sidewalls.

61. A TFT substrate as in claim 53, wherein the semiconductor film pattern comprises: an amorphous silicon film on the insulated film; and a doped amorphous silicon film on the amorphous silicon film.

62. A TFT substrate as recite in claim 53, wherein the second pixel electrode pattern contacts portions of the exposed gate pad.

Allowable Subject Matter

29,

Claims 16-22, 38-41, and 53-62 are allowed.

The following is an examiner's statement of reasons for allowance:



Applicant's arguments regarding the rejection of claim 16 dated 3/21/05 are considered persuasive and consequently claim 16 contains allowable subject matter. The remaining claims act only to further narrow independent claim 16 and are therefore also deemed to be allowable over prior art. Claims 23-28 and 42-45 are considered an obvious variant of allowed claim 16 and is therefore rejoined as claims 53-62 and also deemed to contain allowable subject matter.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura M. Schillinger whose telephone number is (571) 272-1697. The examiner can normally be reached on M-T, R-F 7:00-5:00.

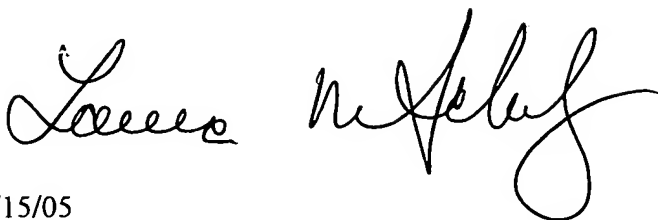
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl W. Whitehead, Jr. can be reached on (571) 272-1702. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in cursive script, appearing to read "Laura M Schillinger". The signature is written in black ink on a white background.

Laura M Schillinger
Primary Examiner
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4/15/05